## AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

## Listing of Claims:

1. (Currently Amended) A network comprising:

an internal secured portion comprising a <u>first</u> virtual private network certificate authority <u>and a second virtual private network certificate authority</u>;

an external portion;

at least one mobile node in the external portion;

at least a first gateway <u>associated with the first virtual private network certificate authority</u>; and

at least a second gateway <u>associated with the second virtual private network certificate authority</u>, where the internal secured portion connects via the first gateway and the second gateway to the external portion, and

the network is configured to change a gateway, which the mobile node uses to communicate with the internal secured portion, from the first gateway to the second gateway <u>via the first and the second virtual private network certificate authorities</u> in response to movement of the mobile node and in response to a receipt from the mobile node of a new care-of-address that is different from a first care-of-address.

2. (Previously Presented) A network as claimed in claim 1, further configured to transfer context information usable by the at least first gateway in communications with the mobile node, to the second gateway.

3. (Previously Presented) A network as claimed in claim 2, wherein the context information includes an identifier of the mobile node.

4. (Previously Presented) A network as claimed in claim 3 wherein the identifier is a home

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address of the mobile node.

5. (Previously Presented) A network as claimed in claim 2, wherein the context information includes material for defining secure communication means by which information is transferable securely between the mobile node in the external portion of the network and the internal secured portion of the network, via the second gateway.

6. (Previously Presented) A network as claimed in claim 5, wherein the secure communication means is a security association pair between the second gateway and the mobile node.

7. (Previously Presented) A network as claimed in claim 2, wherein the context information is transferred from a location that is physically separate from the first gateway.

8. (Previously Presented) A network as claimed in claim 2, further configured to transfer information to the mobile node for enabling communications between the mobile node and the second gateway.

9. (Previously Presented) A network as claimed in claim 8 wherein the information transferred to the mobile node enables secure communication means by which information is transferable securely between the mobile node in the external portion of the network and the internal secured portion of the network, via the second gateway.

10. (Previously Presented) A network as claimed in claim 9, wherein the secure communication means is a security association pair between the mobile node and the second gateway.

11. (Previously Presented) A network as claimed in claim 8, wherein the information transferred to the mobile node comprises an address of the second gateway.

12. (Previously Presented) A network as claimed in claim 8, wherein the information transferred to the mobile node is transferred between the first gateway and the mobile workstation using an existing security association between the mobile node and the first gateway.

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13.(Previously Presented) A network as claimed in claim 1 wherein the second gateway comprises one or more databases which are updated to enable the internal secured portion of the network and the mobile node in the external portion of the network to communicate via the second gateway.

14. (Previously Presented) A network as claimed in claim 13, wherein the one or more databases are a security policy database and a security association database.

15. (Previously Presented) A network as claimed in claim 1 wherein the mobile node comprises one or more databases which are updated to enable the internal secured portion of the network and the mobile node in the external portion of the network to communicate via the second gateway.

16. (Previously Presented) A network as claimed in claim 15, wherein the one or more databases are a security policy database and a security association database.

17. (Previously Presented) A network as claimed in claim 1 further configured to detect a present location of the mobile node and change the gateway through which the mobile node communicates with the internal secured portion of the network, from the first gateway to a better gateway.

18. (Previously Presented) A network as claimed in claim 17, wherein the better gateway is better because it is either closer to the mobile node or it is optimal for routing existing sessions.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Previously Presented) A network as claimed in claim 17, further configured to detect a present location via a location detection means that is separate from the first gateway.

23. (Previously Presented) A network as claimed in claim 22, further configured to transfer information via transfer means physically separate from the first gateway and wherein the transfer means and the location detection means are housed together.

24. (Previously Presented) A network as claimed in claim 1 wherein the first gateway and the second gateway are in distinct physically separated segments of the network.

25. (Previously Presented) A network as claimed in claim 1, wherein the mobile node communicates with the internal secured portion of the network via the first gateway and also via the second gateway simultaneously for a transition period, before communicating via the second gateway only.

26. (Previously Presented) A network as claimed in claim 1 wherein the mobile node is involved in a session with a correspondent node.

27. (Previously Presented) A network as claimed in claim 26, wherein the correspondent node is located in the internal secured portion of the network and the mobile node is located in the external portion of the network.

28. (Currently Amended) A method comprising:

determining when a first serving gateway associated with a first virtual private network certificate authority, through which a mobile node communicates from an external portion of a network with an internal secured portion of the network, is sub-optimal;

identifying a second gateway associated with a second virtual private network certificate authority; and

in response to the mobile node moving and sending a new care-of-address that is different from a first care-of-address to the first serving gateway, transferring the gateway through which

the mobile node communicates with the internal portion of the network from the first serving gateway to the second gateway <u>via the first and second virtual private network certificate authorities</u>, ~~wherein the internal secured portion comprises a private virtual network certificate authority~~.

29. (Currently Amended) A mobile node comprising:

means for receiving, via a first secure communication means, an identifier of a second gateway; and

means for changing from communicating with an internal secured portion of the network through the first gateway to communicating via the second gateway, in response to moving and sending a new care-of-address that is different from a first care-of-address to the first gateway, ~~wherein the internal secured portion comprises a private virtual network certificate authority~~, <u>wherein the mobile node enters a security association for the second gateway into its security association database</u>.

30. (Previously Presented) The network as claimed in claim 23, further comprising means for using a first secure communication means by which information is transferable securely between the internal secured portion of the network and the mobile node via the first gateway, to receive an identifier of the second gateway.

31. (Previously Presented) The network as claimed in claim 23, further comprising means for using a second secure communication means to transfer information securely between the internal secured portion of the network and the mobile node via the second gateway.

32. (Currently Amended) A method comprising:

moving <u>by a mobile node</u> in an external portion of a network, where the network comprises an internal secured portion, the external portion, at least a first gateway, and at least a second gateway;

obtaining a location identifier, where the location identifier comprises a new care-of-address different from a first care-of-address;

sending the new care-of-address to the first gateway; and

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in response to receiving an acknowledgement from the second gateway, communicating via the second gateway, ~~wherein the internal secured portion comprises a private virtual network certificate authority~~ wherein the mobile node enters a security association for the second gateway into its security association database.

33. (Currently Amended) A method comprising:

receiving a new care-of-address that is different from a first care-of-address from ~~by~~ a mobile node that has moved in a network; and

updating a location database in order to change an identification of the first gateway to an identification of a second gateway that the mobile node uses to communicate from an external portion of the network to an internal secured portion of the network, wherein the first gateway is associated with a first ~~internal secured portion comprises a private~~ virtual private network certificate authority in the internal secured portion and the second gateway is associated with a second virtual private network certificate authority and context information for the mobile node is transferred from the first virtual private network certificate authority to the second virtual private network certificate authority.

34. (Currently Amended) An apparatus comprising:

means for receiving a new care-of-address that is different from a first care-of-address by a mobile node that has moved in a network; and

means for updating a location database in order to change an identification of the first gateway to an identification of a second gateway that the mobile node uses to communicate from an external portion of the network to an internal secured portion of the network, wherein ~~the internal secured portion comprises a private virtual network certificate authority~~ the first gateway is associated with a first virtual private network certificate authority in the internal secured portion and the second gateway is associated with a second virtual private network certificate authority in the internal secured portion, wherein context information for the mobile node is transferred from the first virtual private network certificate authority to the second virtual private network certificate authority.

35. (Previously Presented) A network as claimed in claim 1 wherein the network is a virtual

private network.

36. (Currently Amended) A virtual private network certificate authority, comprising:

means for forming first and second security associations <u>between and with a mobile node and the virtual private network certificate authority</u> ~~with a mobile node~~;

means for updating a location database; and

means for forming first and second security associations <u>between and with a gateway node and the virtual private network certificate authority</u> ~~with a gateway node,~~ <u>wherein the first and second security associations between and with the mobile node and the virtual private network certificate authority and between and with the gateway node and the virtual private network certificate authority are encapsulating security payload security associations.</u>